(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 17 June 2004 (17.06.2004)

(10) International Publication Number WO 2004/050117 A1

- A61K 38/46, (51) International Patent Classification7: 48/00, A01K 67/027, C12N 5/10, G01N 33/50, A61P
- 3/04, 3/10
- (21) International Application Number:

PCT/EP2003/013655

- (22) International Filing Date: 3 December 2003 (03.12.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

02 026 921.3

3 December 2002 (03.12.2002)

- (71) Applicant (for all designated States except US): DEVEL-OGEN AKTIENGESELLSCHAFT FÜR ENTWICK-LUNGSBIOLOGISCHE FORSCHUNG Rudolf-Wissell-Str. 28, 37079 Göttingen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MEISE, Martin [DE/DE]; Am Sommerholt 5, 58675 Hemer (DE). EU-LENBERG, Karsten [US/DE]; Vom-Stein-Str. 29, 37120 Bovenden (DE). NGUYEN, Tri [US/DE]; Helmoltstr. 15, 37081 Göttingen (DE). TSETSENIS, Theodoros [GR/GR]; Alexandroupoleos 6, GR-200 06 Corinthos (GR).

- (74) Agents: WEICKMANN, Franz, Albert et al.; Weickmann & Weickmann, Postfach 860 820, 81635 München (DE).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

2004/050117 A1



(57) Abstract: The present invention discloses PRL-1 homologous proteins regulating the energy homeostasis and the metabolism of triglycerides, and polynucleotides, which identify and encode the proteins disclosed in this invention. The invention also relates to the use of these sequences in the diagnosis, study, prevention, and treatment of metabolic diseases and disorders.